To: North Zone Emergency Departments Staff and Physicians

Dear Colleague:

Re: ALGORITHM UPDATE - Wound Management–Tetanus Prevention Immunization Algorithm

Background:
We are taking this opportunity to update the North Zone Wound Management–Tetanus Prevention algorithm. The algorithm is for tetanus immunization in the setting of wound management as well as a report of immunization to be sent to CDC Intake for recoding into the Electronic Medical Record.

Changes to algorithm:
- Page 2: In vaccine administration section removal of “injury type, injury date, ordered by and administered by” to accommodate record retention guidelines.

Actions Required:
Please discard all previous versions of the algorithm: Wound Management–Tetanus Prevention in your facility and replace with the updated version (attached, and dated February 2019).

As directed in the algorithm, please notify Public Health by phone if TIG is indicated (any age) or if a tetanus-containing vaccine is required for a child under 7 years. With the exception of Grande Prairie Emergency Department, TIG is only available through Public Health. Unimmunized or incompletely immunized children under 7 years require age-appropriate tetanus-containing vaccine available only through local Public Health Centers.

To Contact Public Health (for TIG, patients less than 7 years of age, or a consult):
- Monday to Friday 0830 – 1630 (excluding holidays): call NZ CDC Intake at 1-855-513-7530
- Evenings, weekends, holidays: call Public Health On Call (PHOC), call 1-800-732-8981
- Nights 2300 – 0700, please call PHOC next morning after 0700. For TIG release (QEII ED only), call MOH at 1-800-732-8981.

Note: We request that non-urgent notifications or consultations during the night (2300-0700) be reported the next morning. Public Health can follow-up with your patients next day.

Thank you for your continued role in communicable disease prevention.

Sincerely,

North Zone Medical Officers of Health

This letter has been posted on http://www.albertahealthservices.ca/medstaff/Page7082.aspx
| **What** | Tetanus disease is characterized by muscle spasms usually beginning in the jaw (lockjaw). As the disease progresses, the generalized rigidity and convulsive spasms of the skeletal muscles can cause serious complications and death unless treatment is provided.  
Respiratory diphtheria affects the mucous membrane of the upper respiratory tract.  
Pertussis (whooping cough) is a highly communicable bacterial respiratory illness. |
| **Who** | People with tetanus-prone wounds who have not had a complete series of tetanus-containing vaccine are at risk of developing tetanus disease.  
Occasional cases of imported diphtheria are identified in developed countries, like Canada.  
Unimmunized/under immunized infants and adolescents & adults who have not received a pertussis booster are at risk of infection. One pertussis booster is recommended for all adults regardless of previous immunization history. |
| **When** | The need for immediate administration of tetanus-containing vaccine, with or without tetanus immune globulin (TIG) depends on both the nature of the wound and the immunization history. |
| **Where** | During wound assessment in the Emergency Department, individuals who are identified as previously unimmunized or incompletely immunized may qualify for TIG and tetanus/pertussis containing vaccine. |
| **Why** | The tetanus case fatality rate in the unimmunized varies from 10% to over 80% and is highest in infants and the elderly.  
Death occurs in 5% to 10% of diphtheria cases.  
One to three deaths related to pertussis occur each year in Canada, mainly in infants. |
| **How** | Tetanus vaccine is only available as a combination vaccine. Pertussis cases are rising in Alberta, therefore by using the combination vaccine dTap (diphtheria, tetanus, acellular pertussis) in the Emergency Department setting we are also providing simultaneous protection against diphtheria and pertussis (whooping cough) disease. |
FAX page 2 to NZ CDC Intake: 1-855-532-4373

• Follow wound management algorithm below, if vaccine administered, complete and fax page 2.
• If this is an Animal Bite/Exposure, complete additional form “Animal to Human Exposure Incident Form”.
• If this is a Blood and/or Body Fluid Exposure, complete the “Red Kit”.

![Flowchart Diagram]

\[dTap = \text{diphtheria/tetanus & acellular pertussis vaccine}\]
\[TIG = \text{tetanus immunoglobulin}\]

1 Tetanus-prone = a wound other than a clean minor wound, including any of the following:

- a significant degree of devitalized tissue
- avulsion
- Abscesses, cellulitis, chronic ulcers & other wounds in patients w/diabetes mellitus or illicit injection drug users
- contaminated with soil, dirt, manure, feces/saliva
- crush injury
- Wounds sustained more than 6 hours before surgical treatment of wound/burn
- clinical evidence of sepsis or necrosis
- puncture-type wound
- Wounds resulting from missiles (gunshots)
- animal bite/scratch
- frostbite, burn

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- If dTap has been given, please fax page 2 for entry into Meditech.
<table>
<thead>
<tr>
<th>Patient demographics (affix patient label if available)</th>
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- dTap (Boostrix® or Adacel®)
  - Dose: 0.5 mL
  - Route: IM
  - Site: _____Lot # __________Date & Time given ____________

Complete and fax to NZ CDC Intake: 1-855-532-4373